

8 / Affidavit
M. Watts

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

TENNIS RACQUET EQUIPPED) Art Unit: 3711
WITH A TENNIS BALL RETRIEVER)
) Serial No.: 09/655,743
Alice H. Howe)
) Docket No.: MPH 99-46
Filed: 09/06/00)

AFFIDAVIT UNDER 37CFR1.132

STATE OF WISCONSIN)
)
COUNTY OF LA CROSSE)

I, ALICE HOWE, being duly sworn, deposes and states as follows that:

1. I was granted an R.N. degree by St. Frances School of Nursing. I was employed as a Registered Nurse at the La Crosse Clinic from 1958 to 1969; at the University of La Crosse Health Center from 1970 to 1980; and at St. Frances Hospital from 1980 to 1995. I have been an avid tennis player and fan for more than half a century, having played tennis on tennis courts throughout the U.S.A., Mexico and Europe.
2. I devised the testing procedures used to test the efficacy of hook and loop type fasteners as reported in the Example of the captioned patent application.
3. I am also the applicant of the invention described and claimed in the above application.
4. I have read and am familiar with the Office Action of Paper No. 3, the claims as currently to be amended in the response to Paper No. 3 by my attorney, the cited references of Paper No. 3, and the rejection of claims 1-7, 9, 10 and 12 as unpatentable over 35USC103(a) over U.S. Pat. No. 4,834,393 (*Feldt*) or French Patent No. 2594037 (*Musslin*), and either in view of U.S. Pat. No. 5,077,870 (*Melbye et al*) and alleged

applicant's admission of prior art in the specification; and the rejection of claims 8, 11 and 13-15 as unpatentable over *Feldi*, or *Musslin*, and in view of *Melbye* and applicant's admission of the prior art in his specification and in further view of U.S. Patent cited No. 4,993,712 (*Urwin*).

5. Pursuant to the request of my patent attorney, a mushroom-type strip fastener, representative of U.S. Patent No. 5,077,870 (*Melbye*), was tested under identical testing procedures as reported in the Example of the captioned patent application to determine its ability to engage and lift ordinary tennis balls from the ground. Representatives of the manufacture and patent assignee of the U.S. Patent No. 5,077,870 (*Melbye*) indicated that the loop mushroom-type strip fasteners (Dual-lock) used in this test was fairly representative of the mushroom-type fasteners of U.S. Patent No. 5,077,870. In the test, a one-foot length of the mushroom-type strip fastener was attached by its own adhesive backing to the outer edge of the shoulder of a Wilson tennis racquet. Pursuant to the test, three of the most commonly used tennis balls, namely Wilson Championship tennis ball, Dunlop Tournament tennis ball, and Penn Medalist tennis ball were tested. In each test, ten attempts were made to engage and lift each ball by firmly contacting the face of the "Dual-lock" fastener material to the felt or nap of the tennis ball.

6. In all thirty attempts of paragraph 5 above, to lift the three different types of tennis balls off the ground with the mushroom-type strip fastener of U.S. Patent No. 5,077,870 (*Melbye*), all attempts were completely unsuccessful upon all of the tested tennis balls. The "Dual-lock" mushroom-type fastener of U.S. Patent No. 5,077,870 (*Melbye*) failed to adhere, stick or attach onto any of the felt surfaces of any tennis ball in any of the aforementioned 30 test attempts.

7. It is therefore concluded that the tested mushroom-type strip fastener of U.S. Patent No. 5,077,870 (*Melbye*), when attached to the edge of an ordinary tennis racquet, is totally ineffective for retrieving ordinary tennis balls off the ground upon tangential contact as prescribed by my amended claims.

8. The physical and functional properties of the *Melbye* mushroom-type fastener do not permit it to engagingly attach or adhere to the felt surface of a common tennis ball as evidenced by the test results reported herein.

9. The mushroom-type fastener of U.S. Patent No. 5,077,870 to *Melbye* cannot engage and lift a grounded tennis ball upon tangential contact as defined by the amended claims of the captioned application.

10. It is factually incorrect to conclude that *Melbye* U.S. Patent No. 5,077,870 at column 1, lines 15-23 discloses Velcro™ and ScotchMate™ are functional equivalents as hook-and-loop fasteners or that equivalency may be extended to cover the uniquely different pre-shrunk nylon monofilament hooks of the highly specific and narrowly defined characteristics as defined by the currently amended claims.

11. The mushroom-type fastener of U.S. Patent No. 5,077,870 to *Melbye* fails to meet the claimed requirements of a series of pre-shrunk nylon monofilament hooks of:

- a) an average height of at least 1.85 mm
- b) an average diameter of at least 8.25 mil
- c) an average hook width of at least 1.0 mm; and
- d) an average hook depth of at least 0.6 mm

12. United States Patent No. 5,077,870 to the *Melbye* patent discloses and claims "a mushroom-type hook strip" having an "array of upstanding stems" and "a mushroom head at an end of the stem" as shown in Figure 1 of the *Melbye* patent which is clearly different in physical and functional characteristics from the claimed preshrunk monofilament hooks as illustrated in Figure 5 of the captioned application.

13. The mushroom headed stem of U.S. Patent No. 5,077,870 to *Melbye* patent is completely different in physical structure and function from the claimed hooked configuration and characteristics of the claimed preshrunk monofilament hooks.

14. The *Melbye* mushroom hook fasteners are neither the actual nor functional equivalent of the monofilament hooks as characterized and defined by the currently

pending claims in the captioned application as verified with the testing results reported herein.

15. For comparison purposes to the mushroom-type fastener of U.S. Patent No. 5,077,870, a monofilament as defined in claims 4-15 of the captioned application, when tested pursuant to Example 1, provided the unexpectedly superior efficacy upon tangential contact onto all three types of grounded tennis balls, as has been reported in the Example of the captioned patent applicant.

16. The above comparative test results represent a fair comparison between the claimed preshrunk monofilaments of the captioned application and the mushroom-type fasteners of U.S. Patent No. 5,077,870.

17. Further deponeth sayeth naught.

Alice H. Howe 10/18/01
Alice H. Howe Date
Affiant

STATE OF WISCONSIN)
) ss.
COUNTY OF LA CROSSE)

Personally came before me this 18th day of October, 2001,
the above-named Alice H. Howe to me
known to be the person who signed as Affiant who executed
the foregoing instrument and acknowledged the same.

[Signature]
Notary Public
State of Wisconsin

My commission expires May 8, 2005